

IN THE CLAIMS:

1.-14. (Canceled)

15. (Previously Presented) A method of forming a circuit feature on a plurality of substrates in a semiconductor production line, the method comprising:
preparing said substrates for receiving a resist mask corresponding to said circuit feature;
establishing an exposure map for a step and repeat exposure of said substrates;
updating said exposure map for a plurality of specified locations on a specified one of said substrates on the basis of:
inline measurement data obtained from one or more of said substrates, wherein at least a portion of said inline measurement data is obtained from substrates prior to exposure and from substrates after exposure; and
electrical measurement data related to said circuit feature after said circuit feature is completed;
exposing said specified substrate with said updated exposure map to form said resist mask; and
performing a manufacturing sequence to form said circuit feature by using said resist mask.

16.-25. (Canceled)

26. (Previously Presented) An advanced exposure tool control system, comprising:
a control unit operatively connectable to an exposure tool and configured to adjust at least
one exposure parameter of said exposure tool, said control unit being further
configured to:
receive information about an inline parameter indicative of a characteristic of a
predefined location on a plurality of substrates, said information
comprising:
inline measurement data obtained from one or more of said substrates,
wherein at least a portion of said inline measurement data is
obtained from substrates prior to exposure and from substrates
after exposure; and
electrical measurement data related to a circuit feature on one of said
substrates after said circuit feature is completed; and
update said at least one exposure parameter for said predefined location on the
basis of said information.